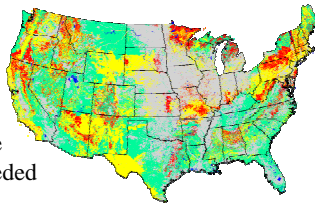


Background

LANDFIRE is an interagency cooperative project designed to produce a comprehensive suite of standardized, scientifically credible spatial data layers and software needed to support implementation of the National Fire Plan, Cohesive Strategy, and the Healthy Forest Restoration Act across the United States. LANDFIRE builds on the 1999 coarse-resolution fire regime condition class (FRCC) by the Forest Service Missoula Fire Sciences Laboratory and develops landscape-scale vegetation, fuels, and FRCC data for application in fire resource allocation, treatment prioritization, evaluation of success of wildfire management activities, specific restoration or hazard reduction projects and strategic wildfire management planning. Models and methods are currently being developed and refined in two large prototype areas in the western United States: central Utah and the northern Rocky Mountains. In FY04, the LANDFIRE technical team begins national implementation of the prototype methodology for the nation.



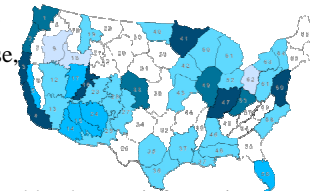
National Implementation

In October 2003 the Wild Fire Leadership Counsel (WFLC) endorsed the national implementation of LANDFIRE and approved allocation of funding to get the effort started. The team has developed a project charter to be approved at the next WFLC meeting in February 2004.

A national project manager has come onboard for a 120-day detail as we continue to try to fill the position on a permanent basis. Effort is ongoing to fill the two department-level Business Lead positions.

The LANDFIRE team has begun to identify partners for collecting supplemental field reference data focusing on rangeland vegetation in the western U.S. For forest field data needs, the LANDFIRE team will seek the critical cooperation from the U.S. Forest Service Forest Inventory and Analysis Program. A national field data strategy white paper is being drafted.

The Interagency Fuels Group in Boise, ID, has been consulted to prioritize scheduling of mapping zones for the national implementation, based on regional fire management needs and availability of satellite imagery and land cover information.

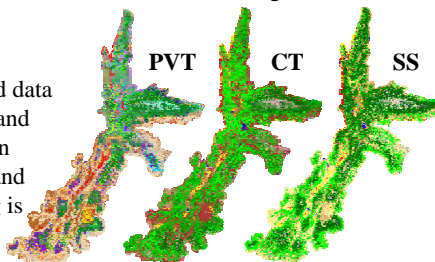


Prototype Status

The prototype zone 16 has been completed on schedule for field reference data collection and processing, image processing, biophysical mapping, and modeling of potential vegetation types (PVT), existing cover types (CT), and existing structure stage (SS). In addition, two computer simulation models that are integral parts of the project have been developed and tested. The technical team is currently refining LANDSUM, a model to generate FRCC based on a set of ecological rules and to develop input data for advanced modeling of fire behavior and effects and fire hazards. The remaining deliverables will be completed soon.



Work has begun for the prototype zone 19. Field data collection, biophysical and PVT mapping have been completed, cover type and structure stage mapping is underway.



More Information



LANDFIRE produced data, maps, and research results are distributed via project web page: www.landfire.gov. Further information about the project may be obtained by contacting Dr. Matthew Rollins (mrollins@fs.fed.us) or Dr. Zhiliang Zhu (zhu@usgs.gov).

Publications and technical presentations

A special technical session was conducted at the 2nd International Wildland Fire Ecology and Management Congress in Orlando, FL, November 16-20, 2003; seven conference papers were presented:

- Rollins *et al.* LANDFIRE: A nationally consistent and locally relevant interagency fire, fuels, and risk assessment
- Keane *et al.* Developing the spatial programs and models needed for implementation of the LANDFIRE project
- Holsinger *et al.* Biophysical settings – linking landscape patterns to ecophysiological processes
- Zhu *et al.* A repeatable consistent national vegetation mapping strategy
- Huang *et al.* Preliminary LANDFIRE vegetation products in the Utah prototype
- Parsons *et al.* Predictive mapping of fire regimes
- Long *et al.* Potential management applications of the LANDFIRE products

Other LANDFIRE publications:

- Rollins, *et al.* (in press). Mapping Fuels and Fire Regimes Using Remote Sensing, Ecosystem Simulation, and Gradient Modeling. *Ecological Applications*.
- Keane, *et al.* 2002a. Predictive landscape modeling using gradient-based sampling, remote sensing, and ecosystem simulation. USDA Forest Service General Technical Report RMRS-GTR-92. Rocky Mountain Research Station, Fort Collins, Colorado, USA.

Three oral presentations were conducted at the Society of Range Management annual meeting in Salt Lake City, UT, in January 2004.